

Indian Business Ecosystem – Challenges in the Knowledge Economy



Management

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ABSTRACT

Organizations today are deeply embedded in a complex ecosystem which is a dynamic network of inter-dependent organizations and depend on each other for success. There is constant change in the business environment which is very fast and inevitable. Understanding a company's space in its ecosystem can help anticipate its market strengths, challenges and its struggle for survival and sustenance during change.

Today, there is a shift in the rules of business as we transit from industrial economy to knowledge based economy. Today, organizations operate in a complex business environment, integrating competition and cooperation innovatively to survive and sustain challenges of global competition. Such complex symbiotic relationships and networks signify business ecosystems.

This conceptual study analyses the origin of the concept 'business ecosystem' and analyses the ecosystem structure in the changing context of the economy from the industrial period to the knowledge based economy. Exploring the gaps and challenges posed in execution of ambitious programs of Make in India, Skill India and Digital India to transform India into a knowledge based economy is the focus of this study.

Introduction

Just as the biological ecosystem, the business ecosystem includes a network of organizations including suppliers, distributors, competitors, customers, government etc, wherein all stakeholders are involved in the delivery of products and services affects and get affected. Although business networking has been in existence for hundreds of years, it was loosely networked. But with increasing business challenges in the second half of the 20th century, due to the development of social, economic, political and technological systems coupled with business networking popularity saw the evolution of Business Ecosystem. Thus it's an evolving relationship in which business need to be flexible and adaptable in this competitive business environment.

Business Ecosystem – Origin & Definition

In the early 1990's James F Moore originated the strategic planning concept of a business ecosystem which is now widely adapted by the business community. The definition comes from Moore's book, *The Death of Competition, Leadership & strategy in the Age of Business Ecosystems*.

Dr. James F. Moore was a Senior Fellow at Harvard Law School's Berkman Centre for Internet & society where he founded the Open Economics Project. He studied changes in large scale social, economic and technical systems and is the pioneer and originator of biological metaphors of organization behavior such as 'Business Ecosystem', 'Internet Ecosystems' and the ecological approach to alliances and alliance based competition. His research is primarily based on case studies in the high technology sector where the PC and Internet technologies favored network based competition. The concept first appeared in Moore's May/June 1993 Harvard Business Review article titled 'Predator and Prey: A New Ecology of Competition' and won the McKinsey Award for articles of the year.

Moore defined 'business ecosystem' as: - "An economic community supported by a foundation of interacting organizations and individuals – the organisms of the business world. The economic community produces goods and services of value to customers, who are themselves members of the ecosystem. The member organisms also include suppliers, lead producers, competitors and other stakeholders. Over time, they co-evolve their capabilities and roles and tend to align themselves with the directions set by one or more central companies. Those companies holding leadership roles may change over time, but the function of ecosystem leader is valued by the community because it enables members to move toward shared visions to align their investments and find mutually supportive roles."

Iansiti & Levien(2004b) define business ecosystem as " these loose networks – suppliers, distributors, outsourcing firms, makers of related products or services, technology providers and a host of other organizations – affect and are affected by the creation and delivery of a company's own offerings", - thus describes business ecosystem as an interconnected business networks, wherein an individual species in a biological ecosystem, each member of a business ecosystem ultimately shares the fate of the network as a whole regardless of that members evident strength.

Interestingly evolution of ecosystem leads to co-evolution, where members or parts of the ecosystem evolve correspondingly. According to Moore (2003) Digital Business Ecosystem (DBE) is the co-evolution of a Business Ecosystem evolution.

Business Ecosystem - Structure & Analysis

In an ecosystem, other companies must succeed in order for an organisation to achieve its goals. For e.g. Dalmia cement can sell cement only when there is construction activity undertaken by the builders or builders will get their revenue only when banks provide housing loan to its prospective buyers.

If a business ecosystem already exists, first its operation should be understood – i.e., the business ecosystem structure: shared fates, members' strategies, roles, opportunity environment and interconnectedness. Business ecosystem members' strategies and roles can be determined from the series of actions in their operations in the business ecosystem. Opportunity environment refers to the market share, dynamics, age. Interconnectedness refers to the type of interaction in business activities – are the ecosystem activities connected through certain platform, connectivity through technology or shared media.

Additionally, the health of the current business ecosystem should be analysed with three effective measures: *robustness, productivity and niche creation*.

If the business ecosystem does not exist and the company determines to craft an ecosystem- a vision, a strategic intent, its role in the ecosystem, mission strategies are to be built around the vision and an opportunity

Whether the ecosystem exists or is to be created, the structure needs to be formulated by specifying the elements 'species' in the business ecosystem. Iansiti & Levien (2004a, 2004b, 2005) formulate the ecosystem structure as a business ecosystem with the species: Keynotes, Dominators, Hub landlords and

Niche Players.

While keystones shape, what an ecosystem does, niche species are what it does. They are so critical that firms must follow the strategies of niche species; Niche species develop specialized capabilities that differentiate them from other firms in the network.

The ecosystem evolution is a dynamic process and for this reason the roles are by no means stable. When business is volatile in an ecosystem it is highly vulnerable to the external factors. In such an environment, the keystone like behaviour create diversity and act as a buffer in preserving the overall structure, productivity and diversity of the system as non-key species are being eliminated (Iansiti & Levin 2004a).

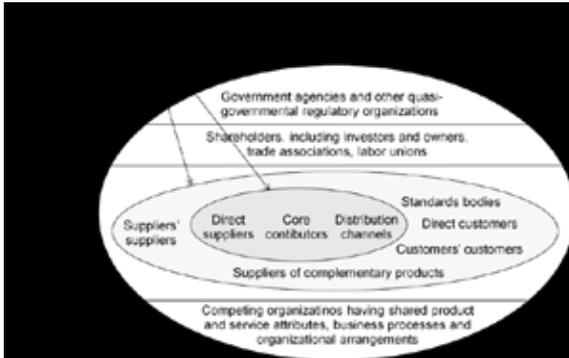


Exhibit - 1: Business Ecosystem (Moore, 1996)

According to Moore (1996), the business ecosystem is made up of customers, market intermediaries, companies selling complementary products, suppliers and the company itself which can be thought of as the primary species of the ecosystem. As far as ecosystem structure, roles and networking are concerned, Moore does not elaborate on them in detail. According to him, the business ecosystems can be considered as small business initiatives or vast collection of enterprises, where the boundaries can be fuzzy. Moreover Moore emphasizes the evolutionary stages of the ecosystem, its evolution and describes the challenges in each stage.

Business Ecosystem – Why is it important?

A business ecosystem provides a platform to leverage excellence in technology, research, marketing, innovation at local levels, industry sectors to compete at the global level. It addresses two market dimensions:

Ecosystem provides stability in business model and resistance to invasion. E.g., Microsoft, which resists changes to their business models and drive communities to serve them.

In unstable environments, ecosystem provides resilience against external change. In fact, business ecosystem nurtures new business models. They protect large collaborators who are increasingly vulnerable in the dynamic world but leverage new players to attack other large and dominant incumbents.

Government initiatives to leverage Indian Business Ecosystem

The Indian Government under the vibrant & visionary leadership of Prime Minister. Narendra Modi, many ambitious initiatives have been introduced to strengthen the economic health of the country. *Make in India*, *Skill India* and *Digital India* programs have been launched to create jobs, empower citizens and create knowledge-based economy and restructure the business ecosystem.

Make in India is attracting FDI re-establishing India as a global manufacturing centre to accelerate the physical capital through

the infrastructure development and generate employment opportunities in all sectors across the country. While Skill India is focused not only to enhance skill development and training but also to leverage entrepreneurship skills in the country that will motivate, encourage and harness ingenious innovative ideas at the grass-root levels and initiate enterprises. Whereas, Digital India is aimed at digitalizing the entire country and build a comprehensive e-infrastructure to complement the physical infrastructure to achieve our long term economic goals of Vision India thus build a strong integrated ecosystem leveraging the rural and the unorganized sectors in the country.

A Review of Indian Education & Skill Gap in Business Ecosystem in the Knowledge based Economy

In India, when it comes to the question of “what after Schooling” it’s a sad reality that majority perceive skilling and vocational training as a choice of last resort and those who could not make headway through the formal academic degrees opt for these training programs. With around thirty lakh graduates joining the job market every year, only around five lakh graduates are considered to be employable having the appropriate skill sets. There is an acute shortage of skilled workforce in the sectors of IT, Pharma, Healthcare, Retail, automobiles and FMCG’s etc., Moreover, the vocational training programs are neither updated with the current industry trends nor linked with the employment needs. According to National Skill Development Corporation, the growing skills gap in India is estimated to be more than twenty five crore workers by 2022. The enormity of the challenge is huge when India’s demographic dividend is expected to contribute 25% of global workforce by 2025.

Moreover, today, talent is the most valuable asset of a company. Against the backdrop of a volatile business ecosystem coupled with the war of talent, it’s a challenge for companies to retain talented workforce through strategic employment engagement initiatives and enhance productivity. A study by Dale Carnegie Employee Engagement in India 2014 report indicates a high level of employee engagement amongst Indian workforce compared to the global average. However, the issue of concern here is that 52% of Indian employees are dissatisfied in their jobs, indicating that companies need to take proactive steps to sustain employee engagement.

However, with the mandate of the new Companies Act to spend 2% of an organization’s profit on activities related to CSR, majority of the corporate have been adopting CSR initiatives to skill its workforce. This has proven beneficial and an asset for the companies engaged in CSR in the form of equipping employees with the competencies and skills to optimize their productivity. In fact, CSR initiatives lead to well-trained, qualified professionals increasing their morale, productivity, efficiency, lower turnover and qualitative customer service thus leveraging the business ecosystem locally and globally.

Notwithstanding the fact that in the tertiary sector such as service industries, significant employment generation is taking place. Self-employment and small business continue to play a vital role. Therefore to integrate the business ecosystem it is necessary to promote major labor – intensive employment generation activities like: agriculture, agri-allied food processing units, textiles, leather products, hospitality services such as restaurants, hotels, tourism, retail, construction, information technology, ITES, small and medium enterprises.

India, on its transit route of change in business ecosystem context, it is only the industry which is aware of skill gap and has the best knowledge about the skill requisites for the current industry facing the global challenges, should address this issue seriously joining hands with the Government and the education sector. The corporate could actively channelize CSR funds and

support industry led skill development program initiatives of the government to accelerate the young workforce for a qualitative business ecosystem.

The Indian economy over the last two decades has grown at a fast pace surpassing \$2 trillion in its GDP. Despite this, and with the ambitious plan of embarking on knowledge – based economy, India faces many barriers in its business ecosystem – from unemployment to poverty to income disparity. With the launching of LGP (Liberalization, Globalization & Privatization) the 1991 economic reforms launched India's development flight by growing the FDI from 0.03% of GDP in 1991 to 3.5% in 2008. The FDI inflows however have stalled at 1.7% of GDP. This declining trend of inbound investment is a threat to India's growth rate.

Amartya Sen, a noted economist noted – a nationwide equitable distribution of improved capabilities will lead to a higher quality of life. To this end, India has to expand and restructure its business ecosystem by expanding its manufacturing base, develop strong institutions to empower citizens both economically and socially and transform itself into a knowledge based economy where innovation is the chief driver of growth in the business ecosystem. In this context Innovation, technology development and commercialization are crucial to India's dream of sustained economic growth.

However, the ambitious dreams of the programs of *Make in India*, *Skill India* and *Digital India* should en-cash the potentials of demographic dividend and churn out the expected results in the days to come.

Conclusion

Business ecosystems are better equipped to address customer needs and demands promptly as it can collaborate to bring in diverse and ingenious skill sets, capabilities and innovative solutions to the problems on hand.

Ecosystems are better equipped to push the companies ahead in times of recession or create a barrier for the entry of its competitors and promote to sustain the environment complexities. Ecosystem, by promoting collaborations lowers the investment costs and offers revenue benefits to its members. It leverages access to sophisticated technology and R & D capabilities. Ecosystems effectively fill gaps and addresses mis-matches or problems promptly. Business ecosystem promotes large business players to participate beyond their capacity out of collaborations.

Recommendations

Members in the ecosystem should be aware of their ecosystem to synthesize information. Ecosystem competence should grow to scan the ecosystem environment. Understand the business models in the business ecosystem. Competence should grow to identify when a keystone organisation is failing or facing financial crunch to take immediate remedial measures. To analyse when a niche player that is rapidly crowded with competitors or becoming obsolete is equally important to avoid failure of the ecosystem.

In the Indian context, for effective business ecosystem and to realize the vision of Skill India, Make in India & Digital India the following are the focus areas,

- To generate innovative and ingenious ideas and deploying them in market-ready enterprises.
- Connecting small and new enterprises to large companies.
- Bridging the gap by aligning education with industry needs through focus on developing vocational training & skill sets.

Empowering and uniting leaders across sectors to develop ecosystem strategies.

To realise the above strategies in the ecosystem we need to promptly expand and restructure the business ecosystem by expanding the manufacturing base, develop strong institutions to empower citizens both economically and socially and transform itself into a knowledge based economy where innovation is the chief driver of growth in the business ecosystem. In this context Innovation, technology development and commercialization are crucial to India's dream of sustained economic growth.

Make in India, *Skill India* and *Digital India* programs have been launched to create jobs, empower citizens and create knowledge –based economy and restructure the business ecosystem.

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